

CLAIMS:

What is claimed is:

1. A side-entry board mounted blade-receiving electrical connector, comprising:

a dielectric housing having a bottom wall and a blade-receiving receptacle at a side of the housing; and

at least one conductive terminal mounted on the housing and including a contact section
5 exposed within the receptacle for electrically engaging a terminal blade of a complementary
mating connecting device inserted into the receptacle generally parallel to a printed circuit
board, a mounting section exposed exteriorly of the housing below the bottom wall thereof for
mounting the connector on the printed circuit board, and a flex section joining the mounting
section to the contact section and performing a dual function of (a) spacing the bottom wall of
10 the housing spaced above the printed circuit board and (b) providing a yielding flexibility
between the connector and the board.

2. The electrical connector of claim 1 wherein the mounting section of said
conductive terminal is a plate-like member for flush mounting on a surface of the printed circuit
board.

3. The electrical connector of claim 1 wherein said conductive terminal is stamped
and formed of sheet metal material.

4. The electrical connector of claim 3 wherein the flex section of said conductive
terminal comprises a generally right-angled bend in the terminal between the mounting section
and the contact section.

5. The electrical connector of claim 1 wherein the contact section of said
conductive terminal is generally U-shaped in a cross-section generally parallel to the printed
circuit board, to define a pair of legs joined by a bight portion, one leg being connected to the
mounting section of the terminal, and the other leg forming a contact portion of the terminal
5 which engages the terminal blade of the mating connecting device.

6. The electrical connector of claim 5 wherein said one leg of the U-shaped contact section is a plate-like member in abutment with the housing, and the other leg of the U-shaped contact section forms a contact arm with portions free to flex toward and away from the one leg.

7. The electrical connector of claim 6 wherein said contact arm has a plurality of flexible spring fingers for engaging the terminal blade of the mating connecting device.

8. The electrical connector of claim 5, including latch means on said other leg for latching the conductive terminal to the housing.

9. The electrical connector of claim 1 wherein said blade-receiving receptacle is a through passage in the housing extending generally parallel to the printed circuit board for receiving a terminal blade of a mating connecting device in either opposite direction of the through passage.

10. The electrical connector of claim 1 wherein the bottom wall of said housing is recessed in an area immediately above the mounting section of the conductive terminal.

11. The electrical connector of claim 1 wherein said housing has at least one anti-overstress wing projecting outwardly therefrom above the printed circuit board to prevent over-flexing of the conductive terminals.

12. The electrical connector of claim 1, including a pair of said conductive terminals at opposite sides of the blade-receiving receptacle.

13. The electrical connector of claim 1 wherein said contact section has a plurality of flexible spring fingers for engaging the terminal blade of the mating connecting device.

14. A side-entry board mounted blade-receiving electrical connector, comprising:
a dielectric housing having a bottom wall and a blade-receiving receptacle at a side of the housing; and

5 a pair of conductive terminals mounted on the housing at opposite sides of said blade-receiving receptacle, each terminal being stamped and formed of sheet metal material and including a contact section having a plurality of flexible spring fingers exposed within the receptacle for electrically engaging a terminal blade of a complementary mating connecting device inserted into the receptacle generally parallel to a printed circuit board, a plate-like mounting section exposed exteriorly of the housing below the bottom wall thereof for flush
10 mounting the connector on a surface of the printed circuit board, and a flex section formed as a right-angled bend in the conductive terminal between the plate-like mounting section and the contact section and performing a dual function of (a) spacing the bottom wall of the housing above the printed circuit board and (b) providing a yielding flexibility between the connector and the board.

15. The electrical connector of claim 14 wherein the contact section of said conductive terminal is generally U-shaped in a cross-section generally parallel to the printed circuit board, to define a pair of legs joined by a bight portion, one leg being connected to the mounting section of the terminal, and the other leg forming a contact portion of the terminal
5 which engages the terminal blade of the mating connecting device.

16. The electrical connector of claim 15 wherein said one leg of the U-shaped contact section is a plate-like member in abutment with the housing, and the other leg of the U-shaped contact section forms a contact arm with portions free to flex toward and away from the one leg.

17. The electrical connector of claim 14, including latch means on said other leg for latching the conductive terminal to the housing.

18. The electrical connector of claim 14 wherein said blade-receiving receptacle is a through passage in the housing extending generally parallel to the printed circuit board for receiving a terminal blade of a mating connecting device in either opposite direction of the through passage.

19. The electrical connector of claim 14 wherein the bottom wall of said housing is recessed in an area immediately above the mounting section of the conductive terminal.

20. The electrical connector of claim 14 wherein said housing has at least one anti-overstress wing projecting outwardly therefrom above the printed circuit board to prevent over-flexing of the conductive terminals.

21. A side-entry electrical connector for mounting on a subjacent support structure, comprising:

a dielectric housing having a bottom wall and a terminal-receiving receptacle at a side of the housing; and

5 at least one conductive terminal mounted on the housing and including a contact section exposed within the receptacle for electrically engaging a terminal of a complementary mating connecting device inserted into the side receptacle generally parallel to the subjacent structure, a mounting section exposed exteriorly of the housing below the bottom wall thereof for mounting the connector on the subjacent structure, and a flex section joining the mounting section to the
10 contact section and performing a dual function of (a) supporting the bottom wall of the housing spaced above the subjacent structure and (b) providing a yielding flexibility between the connector and the subjacent structure.

22. The electrical connector of claim 21 wherein the mounting section of the conductive terminal is a plate-like member.

23. The electrical connector of claim 21 wherein said conductive terminal is stamped and formed of sheet metal material.

24. The electrical connector of claim 23 wherein the flex section of said conductive terminal comprises a generally right-angled bend in the terminal between the mounting section and the contact section.

25. The electrical connector of claim 21 wherein the bottom wall of said housing is recessed in an area immediately above the mounting section of the conductive terminal.

26. The electrical connector of claim 21 wherein said housing has at least one anti-overstress wing projecting outwardly therefrom above the printed circuit board to prevent overflexing of the conductive terminals.

27. The electrical connector of claim 21, including a pair of said conductive terminals at opposite sides of the blade-receiving receptacle.